

MAR 11 2002

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As a below named inventor, I hereby declare that my name, post office address and citizenship are as stated below next to my name, and I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the INVENTION ENTITLED

**TIMING RECOVERY WITH VARIABLE BANDWIDTH PHASE- LOCKED LOOP AND NON-LINEAR CONTROL PATHS**

COPY OF PAPER  
ORIGINALLY FILED

the specification of which (CHECK applicable BOX(ES))

X A. ☐ is attached hereto.  
BOX(ES) → B. ☒ was filed on October 31, 2001 as U.S. Application No. 10/003,330  
→ C. ☐ was filed as PCT International Application No. PCT/ / On /

and (if applicable to U.S. or PCT application) was amended on /

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose all information known to me to be material to patentability as defined in 37 C.F.R. 1.56. Except as noted below, I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT International Application which designated at least one other country than the United States, listed below and have also identified below any foreign application for patent or inventor's certificate, or PCT International Application, filed by me or my assignee disclosing the subject matter claimed in this application and having a filing date (1) before that of the application on which priority is claimed, or (2) if no priority claimed, before the filing date of this application:

**PRIOR FOREIGN APPLICATION(S)**

Number	Country	Day/MONTH/Year Filed	Date first Laid-open or Published	Date Patented or Granted	Priority NOT Claimed
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If more prior foreign applications, X box at bottom and continue on attached page.

Except as noted below, I hereby claim domestic priority benefit under 35 U.S.C. 119(e) or 120 and/or 365(c) of the indicated United States applications listed below and PCT international applications listed above or below and, if this is a continuation-in-part (CIP) application, insofar as the subject matter disclosed and claimed in this application is in addition to that disclosed in such prior applications, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in 37 C.F.R. 1.56 which became available between the filing date of each such prior application and the national or PCT international filing date of this application:

**PRIOR U.S. PROVISIONAL, NONPROVISIONAL AND/OR PCT APPLICATION(S)**

Application No. (series code/serial no.)	Day/MONTH/Year Filed	Status	Priority NOT Claimed
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

And I hereby appoint Pillsbury Winthrop LLP, Intellectual Property Group, 1600 Tysons Boulevard, McLean, VA 22102, telephone number (703) 905-2000 (to whom all communications are to be directed), and the below-named persons (of the same address) individually and collectively my attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith and with the resulting patent, and I hereby authorize them to delete names/numbers below of persons no longer with their firm and to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/ organization who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct the above Firm and/or a below attorney in writing to the contrary.

G. Lloyd Knight	17698	David A. Jakopin	32995	Sean Fitzgerald	32027	James R. Thein	31710
George M. Sirilla	18221	Robert D. Anderson	33826	Leo V. Novakowski	37198	Peter Lam	44855
Alan K. Aldous	31905	Cynthia Thomas Faatz	39973	Mark Seeley	32299	Gene I. Su	45140
Jeffrey S. Draeger	41000	Charles A. Mirho	41199	Raymond J. Werner	34752	Seth Z. Kalsen	4067
David J. Kaplan	41105	Kenneth M. Seddon	43105	Calvin E. Wells	43256	Naomi Obinato	393
Thomas C. Reynolds	32488	Steven C. Stewart	33555	Evan Finkel	49059	Steven C. Skabrat	362
Howard A. Skaist	36008	Thomas Raleigh Lane	42781	W. Patrick Bengtsson	32456	Robert G. Winkle	374
Charles K. Young	39435	Mark G. Paulson	30793	Jack S. Barufka	37087	Robin L. Teskin	
Dale S. Lazar	28872	Stephen C. Glazier	31361	Adam R. Hess	41835	Anthony L. Miele	
Glenn J. Perry	28458	Paul F. McQuade	31542	William P. Atkins	38821	Robert J. Walters	
G. Paul Edgell	24238	Richard H. Zaitlen	27248	Paul L. Sharer	36004	Jeffrey D. Karceski	
Roger R. Wise	31204	Joseph R. Bond	36458	Richard C. Calderwood	35468		

(1) INVENTOR'S SIGNATURE:

Date:

Hiroshi		TAKATORI	
First	Middle Initial	Family Name	
Residence	Sacramento	CA	Japan
City	State/Foreign Country		
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FOR ADDITIONAL INVENTORS, "X" box ☐ and proceed on the attached page to list each additional inventor.

☐ See additional foreign priorities on attached page (incorporated herein by reference).

Atty. Ref. No. P12830

(M#)

Rule 56(a) & (b) = 37 C.F.R. 1.56(a) & (b)  
PATENT AND TRADEMARK CASES - RULES OF PRACTICE  
DUTY OF DISCLOSURE

- (a) ...Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the [Patent and Trademark] Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability... (b) information is material to patentability when it is not cumulative and (1) It also establishes by itself, or in combination with other information, a prima facie case of unpatentability of a claim or (2) refutes, or is inconsistent with, a position the applicant takes in: (i) Opposing an argument of unpatentability relied on by the Office, or (ii) Asserting an argument of patentability

PATENT LAWS 35 U.S.C.**§102. Conditions for patentability; novelty and loss of right to patent**

A person shall be entitled to a patent unless--

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent or
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or
- (c) he has abandoned the invention, or
- (d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months\* before the filing of the application in the United States, or
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent, or
- (f) he did not himself invent the subject matter sought to be patented, or
- (g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

**§103. Condition for patentability; non-obvious subject matter**

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made. . . .
- (c) Subject matter developed by another person, which qualified as prior art only under subsection (a) of section 102 of this title, shall not preclude patentability under this section where the subject matter of the claimed invention were, at the time the invention was made, owned by the same person or derived from an obligation of assignment to the same person.

\* Six months for Design Applications (35 U.S.C. 172).